

ABSTRACT OF THE INVENTION

A device and method for effecting movement, responsive to user input, of an object on a graphical display are disclosed. An input device comprises a component for capturing video images, an input image processor that generates an output signal responsive to motion from the video images, and an output image processor that is programmed to effect movement of the object on the graphical display in response to signals received from the input image processor. Various algorithms are employed within the input image processor to determine initial and derivative data that controls the movement of the object on the graphical display. In a preferred embodiment, video images are captured and processed to isolate a human form from a background, arm position and movement data are calculated from the human form, and a signal is generated responsive to this data for controlling the movement of an object, such as a bird, on a graphical display. The movement controlled on the graphical display can take the form of a moving object, or of the change of perspective that such an object might undergo, for example, a bird's eye view.